

IN THE CLAIMS:

Amend claims 1-17 as follows:

1.(Currently Amended) A method of transmitting an anisochronic data stream from a data source to a data sink over a isochronic transmission network having ~~with~~ a plurality of channels, comprising:

receiving data from the data source, and reserving at least two of the plurality of channels to provide reserved channels for transmission of data from the transmitter onto the transmission network, wherein the cumulative transmission capacities of the reserved channels exceeds the bandwidth of the asynchronous data stream;

partitioning data of the anisochronic data stream into packets;

filling bit locations of the packets not required to transmit the anisochronic data with filler data, and providing packetized data indicative thereof; and

providing the packetized data for transmission over at least one reserved channel of the transmission network.

2.(Currently Amended) The method of claim 1, wherein ~~the~~the said step of providing the packetized data comprises inserting a synchronization pattern into ~~the~~the said packetized data before data associated with the anisochronic data, to identify the portions of the data of ~~the~~the said packetized data as data indicative of ~~the said~~the said anisochronic data.

3.(Currently Amended) The method of claim 2, wherein ~~the~~the said packets each contain the same data quantity.

4.(Currently Amended) The method of claim 2, wherein ~~the~~the said reserved channels are time multiplexed channels, and the transmission network includes a time division multiplexed bus.

5.(Currently Amended) The method of claim 4, wherein the anisochronic data stream comprises audio data.

6.(Currently Amended) The method of claim 5, wherein the transmission network comprises a MOST network.

7.(Currently Amended) The method of claim 6, wherein the MOST network operates at a frequency of 44.1 kMHz, and the anisochronic data stream has a frequency of 48 kMHz or an integer multiple thereof.

8.(Currently Amended) The method of claim 7, wherein the data source comprises a DVD player.

9.(Currently Amended) The method of claim 7, wherein the data source comprises a DVD player.

10.(Currently Amended) A data transmission system, comprising:

a data bus;

a data source that provides an anisochronic data stream;

a transmitter that receives thesaid anisochronic data stream, assigns a plurality of channels associated with thesaid data bus for transmission of data indicative of thesaid anisochronic data stream, partitions thesaid anisochronic data into a plurality of packets and fills

unused bit locations of each packet with filler data, and provides output packets indicative thereof;

a first bus interface that receives thesaid output packets and transmits thesaid output packets onto thesaid data bus;

a second bus interface that receives an output packets on thesaid data bus, and provides input packets indicative thereof; and

a receiver that receives and processes thesaid input packets to recover thesaid anisochronic data stream, and provides a recovered anisochronic data stream indicative thereof.

11.(Currently Amended) The data transmission system of claim 10, wherein thesaid data bus includes a MOST bus.

12.(Currently Amended) The data transmission system of claim 11, wherein thesaid data source includes a DVD player.

13.(Currently Amended) The data transmission system of claim 10, wherein thesaid MOST bus operates at a frequency of 44.1 kMHz, and thesaid anisochronic data stream has a frequency of 48 kMHz or an integer multiple thereof.

14.(Currently Amended) The data transmission system of claim 13, wherein thesaid reserved channels are time multiplexed channels, and thesaid data bus is configured and arranged as a time division multiplexed bus.

15.(Currently Amended) The data transmission system of claim 10, further comprising an intermediate memory device wherein thesaid transmitter stores data indicative of thesaid anisochronic data stream, and when a certain amount of data associated with thesaid anisochronic data stream has been stored in thesaid intermediate memory, thesaid transmitter initiates providing thesaid output packets.

16.(Currently Amended) The data transmission system of claim 15, wherein thesaid transmitter also provides to thesaid first bus interface a synchronization pattern that is transmitted over thesaid data bus prior to each of thesaid packets associated with thesaid anisochronic data stream to identify to thesaid receiver thesaid data associated with thesaid anisochronic data stream.

17.(Currently Amended) An apparatus for transmitting an anisochronic data stream from a data source to a data sink over a isochronic transmission network having with a plurality of channels, comprising:

means for receiving data from the data source, and for reserving at least two of the plurality of channels to provide reserved channels for transmission of data from the transmitter onto the transmission network, wherein the cumulative transmission capacities of the reserved channels exceeds the bandwidth of the asynchronous data stream;

means for partitioning data of the anisochronic data stream into packets;

means for filling bit locations of the packets not required to transmit the anisochronic data with filler data, and for providing packetized data indicative thereof; and

means for providing the packetized data for transmission over at least one reserved

channel of the transmission network.